






Surface-treated polyorganosilsesquioxane fine powder

Patent number: DE3912878
Publication date: 1989-11-02
Inventor: SAITO KENJI (JP); KIMURA HIROSHI (JP)
Applicant: TOSHIBA SILICONE (JP)
Classification:
- international: C08J3/00; C08J3/12; C08K9/06; C08L83/04; C09D5/16; C09D7/12
- european: C08G77/06, C08J3/00B, C08J3/12, C09D5/16C7
Application number: DE19893912878 19890419
Priority number(s): JP19880094548 19880419

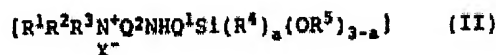
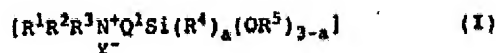
Also published as:

 US4996257 (A1)
 JP1268609 (A)
 GB2219301 (A)
 FR2630124 (A1)
 IT1232998 (B)

Abstract not available for DE3912878

Abstract of correspondent: **US4996257**

A polyorganosilsesquioxane fine powder which is surface-treated with an organosilicon compound containing a quaternary ammonium group, represented by the formula (I) or (II): (I) (II) wherein R1 represents an alkyl group, a substituted or unsubstituted aralkyl group, or a group represented by (CnH2nO)mZ wherein Z represents a hydrogen atom or an alkyl group, symbol n is an integer of 2 to 4, and symbol m is an integer of 1 to 20; R2 and R3 each independently represents a hydrogen atom, an alkyl group or a hydroxyalkyl group; Q1 and Q2 each independently represents an alkylene group; R4 represents an alkyl group or a phenyl group; R5 represents an alkyl group having 1 to 4 carbon atoms; X- represents an anion; and symbol a is an integer of 0 to 3.



Data supplied from the **esp@cenet** database - Worldwide

10/670,132

L19 ANSWER 2 OF 2 CA COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 112:181555 CA

TITLE: Surface-treated silsesquioxanes for antifouling coatings

INVENTOR(S): Saito, Kenji; Kimura, Hiroshi

PATENT ASSIGNEE(S): Toshiba Silicone Co., Ltd., Japan

SOURCE: Ger. Offen., 7 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3912878	A1	19891102	DE 1989-3912878	19890419
JP 01268609	A2	19891026	JP 1988-94548	19880419
JP 2532124	B2	19960911		
GB 2219301	A1	19891206	GB 1989-8477	19890414
GB 2219301	B2	19910925		
US 4996257	A	19910226	US 1989-340509	19890418
FR 2630124	A1	19891020	FR 1989-5231	19890419
FR 2630124	B1	19940225		

PRIORITY APPLN. INFO.: JP 1988-94548 19880419

OTHER SOURCE(S): MARPAT 112:181555

AB The title powders are treated with the quaternary ammonium salts [R1R2R3NZ1Si(R4)a(OR5)3-a]+ X- or [R1R2R3NZ2NHZ1Si(R4)a(OR5)3-a]+ X- [R1 = alkyl, aralkyl, polyoxyalkylene; R2, R3 = H, (hydroxy)alkyl; R4 = alkyl, Ph; R5 = alkyl; Z1, Z2 = alkylene; X = anion; a = 0-3]. A Me silsesquioxane (av. particle size 2 .mu.m) was milled with 0.8 phr [C18H37N(Me)2(CH2)3Si(OMe)3]+ Cl- in MeOH and dried at 105.degree. to give a powder. A mixt. of this powder 100, vehicle 200, Fe2O3 30, and iso-BuCOMe 50 parts was sprayed (100 .mu.m) on primed steel and left 24 h at room temp. to give a coating showing little or no fouling by marine organisms after 6 mo in seawater.

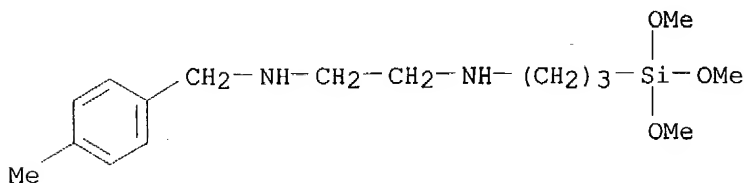
IT 126739-07-9

RL: USES (Uses)

(powd. silsesquioxanes treated with, for antifouling coatings)

RN 126739-07-9 CA

CN 1,2-Ethanediamine, N-[(4-methylphenyl)methyl]-N'-[3-(trimethoxysilyl)propyl]-, monohydrochloride (9CI) (CA INDEX NAME)



1026
1-3

● HCl